

The following claims are presented for examination:

1. **(currently amended) Process A process** for producing multi-component mineral substance preparations free of harmful substances **~~comprising the following steps , the process comprising:~~**

a. **Primary performing a primary** thermo-oxidative treatment of organic raw materials, of **~~plant or animal origin that is one of (i) plant origin and (ii) animal origin~~**, in a primary temperature treatment zone **~~, resulting in primarily oxidized material;~~**

b. conditioning the primarily oxidized material:

[[b.]] c. Transport of transporting the product of the primary thermo-oxidative treatment to a second temperature treatment zone **~~; and~~**

[[c.]] d. Secondary performing a secondary thermo-oxidative treatment in a second temperature treatment zone.

Claims 2 – 11 **(cancelled)**

12. **(new)** The process of claim 1,
characterized in that during the conditioning, the coarser particles are sieved off, wherein a sieve is chosen that allows only particles smaller than 1 mm to enter into the secondary temperature treatment zone.

13. **(new)** The process of claim 1,
characterized in that the primary thermo-oxidative treatment is performed at a temperature of between 500°C and 3000°C.

14. **(new)** The process of claim 1,
characterized in that the secondary thermo-oxidative treatment is performed continually.

15. **(new)** The process of claim 1,
characterized in that the secondary thermo-oxidative treatment is performed quasi-continually.

16. **(new)** The process of claim 1, characterized in that the secondary thermo-oxidative treatment is performed using at least one of (i) enriched oxygen and (ii) steam.

17. **(new)** The process of claim 1, characterized in that the secondary thermo-oxidative treatment is performed using at least one of (i) pure oxygen and (ii) steam.

18. **(new)** The process of claim 1, characterized in that the primarily oxidized material, after it has been passed through the primary temperature level, experiences a cooling by at least 50°C.

19. **(new)** The process of claim 1, characterized in that the direction of flow of the waste gases is selected so that it is parallel to the direction of movement of the primary oxidate in the secondary oxidation process.

20. **(new)** The process of claim 1, characterized in that the secondary thermo-oxidative treatment is performed at a higher temperature than the primary thermo-oxidative treatment, typically at least 10°C above the temperature of the primary thermo-oxidative treatment.

21. **(new)** The process of claim 1 further comprising grinding mechanically the product of the secondary thermo-oxidative treatment.

22. **(new)** The process of claim 21, characterized in that the grinding is carried out under dry and/or wet conditions.

23. **(new)** The process of claim 21 further comprising adding an organic acid to the ground substance in a diluted environment.

24. **(new)** The process of claim 1, characterized in that said organic raw materials comprises at least one of vegetables, fruit, grasses, nutshells, lemon peels, orange peels, grapefruit peels, grain brans, the remains of olives, wood, stinging nettle, spinach, and the remains of sugar beets.

25. **(new)** Mineral substance preparations producible in accordance with a method that comprises:

a. performing a primary thermo-oxidative treatment of organic raw materials, of plant or animal origin, in a primary temperature treatment zone, resulting in primarily oxidized material;

b. conditioning the primarily oxidized material;

c. transporting the product of the primary thermo-oxidative treatment to a second temperature treatment zone; and

d. performing a secondary thermo-oxidative treatment in a second temperature treatment zone;

characterized in that said mineral substance preparations exhibit a $(K+Na) / C(\text{organic})$ mass ratio of greater than 100.

26. **(new)** The mineral substance preparations of claim 25, characterized in that said mineral substance preparations exhibit a $(K+Na)/\text{nitrate}$ ratio of greater than 1000.

27. **(new)** The mineral substance preparations of claim 25, characterized in that said mineral substance preparations contain clusters of trace element, wherein these clusters consist of at least one trace element.

28. **(new)** The mineral substance preparations of claim 27, characterized in that the mean diameter of the clusters lies between 0.3 nm and 500 nm.

29. **(new)** The mineral substance preparations of claim 25, usable as at least one of a nutritional supplement, food additive, beauty aid, and medication, wherein intake can be in one of oral form, inhalative form, intravenous form, rectal form, and topical form.

30. **(new)** A method for the treatment of heavy metal poisoning, hair loss, chronic nausea, migraine, allergies, cardio-vascular diseases, or high blood pressure, the method comprising prescribing, to a patient, a mineral substance preparation producible in accordance with a method that comprises:

- a. performing a primary thermo-oxidative treatment of organic raw materials, of plant or animal origin, in a primary temperature treatment zone , resulting in primarily oxidized material;
- b. conditioning the primarily oxidized material;
- c. transporting the product of the primary thermo-oxidative treatment to a second temperature treatment zone; and
- d. performing a secondary thermo-oxidative treatment in a second temperature treatment zone;

wherein said mineral substance preparation exhibits a $(K+Na) / C(\text{organic})$ mass ratio of greater than 100.